

**MEMORANDUM**

TO: County Council

FROM: Kathleen Boucher, Senior Legislative Attorney *KWB*

SUBJECT: **Introduction:** Bill 17-06, Buildings – Energy Efficiency and Environmental Design

Bill 17-06, Buildings – Energy Efficiency and Environmental Design, sponsored by Council President Leventhal and Councilmember Praisner is scheduled to be introduced on April 25, 2006. A public hearing is tentatively scheduled for June 20, 2006 at 1:30 p.m.

The bill: (1) requires all new non-residential buildings and multi-family residential buildings that are at least 10,000 square feet in size (“covered buildings”) to obtain 20 LEED points; and (2) creates an incentive for these types of buildings to obtain at least 24 LEED points. With regard to the latter element, the bill makes the owners of buildings that obtain at least 24 LEED points eligible to obtain an energy tax rebate under the Clean Energy Rewards Program.

The LEED (Leadership in Energy and Environmental Design) rating system was developed by the United States Green Buildings Council. It identifies criteria that positively impact the energy and environmental characteristics of a building, including sustainability of a site, water efficiency, energy efficiency, materials and resources, and indoor environmental quality.

The bill requires the Department of Permitting Services to approve a Green Building Plan that complies with the bill as a condition of a building permit issued to any covered building. The bill is the first component of a 3-part legislative proposal. The second component is a subdivision regulation amendment (SRA) that requires the Planning Board to approve a Green Building Plan that complies with the bill as a condition of preliminary subdivision plan approval for any project that includes a covered building. The third component is a zoning text amendment (ZTA) that requires the Planning Board to approve a Green Building Plan that complies with the bill as a condition of site plan approval for any project that includes a covered building. The SRA and ZTA are expected to be introduced on May 2.

This packet contains:

Bill 17-06  
Legislative Request Report  
LEED scorecard

Circle #

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Bill No. 17-06  
Concerning: Buildings - Energy  
Efficiency and Environmental Design  
Revised: April 19, 2006 Draft No. 1  
Introduced: April 25, 2006  
Expires: October 25, 2007  
Enacted: \_\_\_\_\_  
Executive: \_\_\_\_\_  
Effective: \_\_\_\_\_  
Sunset Date: None  
Ch. \_\_\_\_\_, Laws of Mont. Co. \_\_\_\_\_

## COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

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By: Council President Leventhal and Councilmember Praisner

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**AN ACT** to:

- (1) require certain non-residential buildings and multi-family residential buildings to achieve certain standards relating to energy efficiency and environmental design;
- (2) require certain applicants for preliminary subdivision plan approval, site plan approval, or a building permit to submit certain plans relating to energy efficiency and environmental design to the Department of Permitting Services for approval;
- (3) require the Department of Permitting Services to approve an energy efficiency and environmental design plan as a condition of certain building permits;
- (4) make certain building owners who comply with certain standards relating to energy efficiency and environmental design eligible to receive certain incentive payments;
- (5) define certain terms; and
- (6) generally amend the law relating to the construction of buildings, development review, building permits, energy, and environmental design.

By amending

Montgomery County Code  
Chapter 8, Buildings  
Section 8-26

By adding

Montgomery County Code  
Chapter 8, Buildings  
Article VII, Energy Efficiency and Environmental Design

By amending

Montgomery County Code  
Chapter 18A, Energy Policy  
Section 18A-11

①

<b>Boldface</b>	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

*The County Council for Montgomery County, Maryland approves the following Act:*

1           **Sec. 1.       Section 8-26 is amended as follows:**

2   **8-26. Conditions of permit.**

3                               \*       \*       \*

4           (c)   *Compliance with permit.* All work [shall] must conform to the approved  
5                   application and plans for which the permit has been issued, including  
6                   any **Green Building Plan** approved under Article VII, and any  
7                   approved amendments [thereto] to the permit.

8                               \*       \*       \*

9           **Sec. 2.       Chapter 8 is amended by adding Article VII. Energy**  
10   **Efficiency and Environmental Design:**

11                   **Article VII. Energy Efficiency and Environmental Design**

12   **8-46. Short Title.**

13           This Article may be cited as the Montgomery County Green Buildings Law.

14   **8-47. Policy.**

15           This Article is intended to protect the public health and welfare by requiring an  
16           integrated approach to planning, design, construction, and operation of a  
17           covered building and its surrounding landscape that helps mitigate the  
18           environmental, economic, and social impacts of the building so that it is  
19           energy efficient, sustainable, secure, safe, cost-effective, accessible, functional,  
20           productive, and esthetically attractive.

21   **8-48. Definitions.**

22           In this Article the following words have the meanings indicated:

23           “Covered building” means a non-residential building or multi-family  
24           residential building that is at least 10,000 square feet in size.

25           “Green Buildings Council” means the United States Green Buildings  
26           Council, an organization that has developed and published the LEED rating  
27           system to measure the energy and environmental performance of a building.

**“Green building plan” means a:**

- (1) **LEED scorecard** showing the LEED points that a building will obtain; and
- (2) written explanation of how the building will obtain the LEED points identified in the **LEED scorecard**.

**“Green building concept plan” means a:**

- (1) **LEED scorecard** showing the LEED points that a building will obtain as a result of site location and stormwater management; and
- (2) written explanation of how the building will obtain the LEED points identified in the **LEED scorecard**.

**“LEED accredited professional” means an individual who has passed the LEED Professional Accreditation Exam administered by the Green Buildings Council.**

**“LEED-NC Version 2.2” means the Leadership in Energy and Environmental Design (LEED) Rating System for New Construction and Major Renovation, Version 2.2, developed by the Green Buildings Council, including the LEED-NC Version 2.2 Checklist and LEED-NC Version 2.2 Reference Guide.**

**“LEED rating system” means:**

- (1) **LEED-NC Version 2.2; or**
- (2) if approved by the County Executive, a successor to **LEED-NC Version 2.2** developed by the Green Buildings Council.

**“LEED scorecard” means the checklist developed by the Green Buildings Council for the purpose of calculating a score on the **LEED rating system**.**

**“Multi-family residential building” means a building that includes 4 or more dwelling units.**

54 "Non-residential building" means a building not used as a dwelling,  
 55 including:

- 56 (1) office buildings, including general offices, medical offices, office  
 57 parks, research parks, townhouse offices, government offices, and  
 58 other buildings with similar uses;
- 59 (2) industrial buildings, including truck terminals, warehouses, light  
 60 or heavy manufacturing facilities, industrial parks, and other  
 61 buildings with similar uses;
- 62 (3) retail buildings, including stores, shopping centers, restaurants,  
 63 vehicles sales or service facilities, banks, theaters, post offices,  
 64 and other buildings with similar uses;
- 65 (4) places of worship;
- 66 (5) private elementary, secondary, or post-secondary schools; and
- 67 (6) hotels, motels, day care centers, nursing homes, recreational  
 68 facilities, and other buildings with similar uses.

69 "Planning Board" means the Montgomery County Planning Board of the  
 70 Maryland-National Capital Park and Planning Commission.

71 "Preliminary subdivision plan" means a preliminary subdivision plan  
 72 approved by the Planning Board under Chapter 50.

73 "Site plan" means a site plan approved by the Planning Board under  
 74 Division 59-D-3.

#### 75 **8-49. LEED standard.**

76 (a) Any covered building constructed in the County, including any  
 77 covered building constructed by the County, must achieve 20 points on  
 78 the LEED rating system.

79 (b) The owner of any covered building that achieves at least 24 points on  
 80 the LEED rating system is eligible for an incentive payment under the

Clean Energy and Environmental Design Rewards Program established  
in Section 18A-11.

**8-50. Site plans.**

(a) Before the Planning Board approves a site plan for a project that  
includes a covered building, an applicant must submit the following  
documents to the Department for approval:

(1) a Green Building Plan that shows how the building will  
comply with Section 8-49(a); and

(2) architectural plans for the building that are certified by a  
LEED accredited professional as likely to yield the  
LEED points specified in the Green Building Plan.

(b) Before the Department issues a building permit for a covered building  
for which a site plan is not required, the owner of the building must  
submit the documents listed in paragraphs (a)(1) and (a)(2) to the  
Department for approval.

**8-51. Preliminary subdivision plans.**

Before the Planning Board approves a preliminary subdivision plan, an  
applicant must submit a Green Building Concept Plan to the Department  
for approval.

**8-52. Building permits.**

The Department must approve a Green Building Plan that complies with  
Section 8-49(a) as a condition of any building permit issued for a covered  
building.

**Sec. 3. Section 18A-11 is amended as follows:**

**18A-11. Clean Energy and Environmental Design Rewards Program.**

(a) The Director of the Department of Environmental Protection must  
establish a Clean Energy and Environmental Design Rewards Program.

The purpose of the program is to provide financial and other incentives to:

- (1) consumers who choose electricity produced by renewable and environmentally preferable power sources; and
- (2) building owners who qualify under Section 8-49(b) for participation in the program.

(b) The Director must require each eligible [person] consumer, building owner, or supplier to submit an application for any payment under this program, and may take any other action necessary to administer this program. The Department of Finance must take actions necessary to make any payments that the Director of Environmental Protection has certified are due. The County Executive must issue regulations under Method (1) to implement this Section.

(c) The Executive must adopt program regulations that:

- (1) identify the types of electricity that qualify for incentives under the program;
- (2) restrict or preclude the payment of incentives for purchase of otherwise qualified electricity that a consumer or supplier is required to buy or produce to meet certain federal or state requirements;
- (3) specify the process to apply for, certify, and receive an award; and
- (4) include any additional program criteria, standards, and procedures that are consistent with the County's energy and environmental policy, which among other things may restrict the location or air shed where any qualified electricity is produced.



- (d) The County Council must establish by resolution the maximum amount of any incentive offered and the time period during which the incentive will be offered. The maximum incentive may be calculated by total payments, payment per quantity of electricity bought, or any other reasonable measurement.
- (e) Any incentive payment to individual applicants may be paid on a fiscal year or calendar year basis, or at any other convenient time.
- (f) A person who submits a false or fraudulent application, or withholds material information to obtain a payment under this Section, has committed a Class A violation. In addition, the person must repay the County for all amounts improperly paid, and all accrued interest and penalties that would apply to those amounts, as if they were overdue taxes. A person who violates this Section is liable for all court costs and expenses of the County in any civil action brought by the County to recover any payments, interest, or penalty. The County may collect any amount due, and otherwise enforce this Section, by any appropriate legal action.

**Sec. 4. Applicability.**

This Act applies to any covered building for which a preliminary subdivision plan application, site plan application, or building permit application is filed on or after the date the Act takes effect.

*Approved:*

George L. Leventhal, President, County Council

Date

# LEGISLATIVE REQUEST REPORT

Bill 17-06

## *Buildings – Energy Efficiency and Environmental Design*

<b>DESCRIPTION:</b>	The bill requires any new non-residential building or multi-family residential building that is at least 10,000 square feet in size to obtain at least 20 LEED (Leadership in Energy and Environmental Design) points. It also makes the owners of these types of buildings eligible for an energy tax rebate under the Clean Energy Rewards Program if a building obtains at least 24 points.
<b>PROBLEM:</b>	There is a need for an integrated approach to planning, design, construction, and operation of a building and its surrounding landscape that helps mitigate the environmental, economic, and social impacts of the building so that it is energy efficient, sustainable, secure, safe, cost-effective, accessible, functional, productive, and esthetically attractive.
<b>GOALS AND OBJECTIVES:</b>	Protect the public health and welfare by requiring an integrated approach to planning, design, construction, and operation of a covered building and its surrounding landscape that helps mitigate the environmental, economic, and social impacts of the building so that it is energy efficient, sustainable, secure, safe, cost-effective, accessible, functional, productive, and esthetically attractive.
<b>COORDINATION:</b>	Department of Permitting Services, Department of Public Works and Transportation, Department of Environmental Protection, and Montgomery County Planning Board.
<b>FISCAL IMPACT:</b>	To be requested.
<b>ECONOMIC IMPACT:</b>	To be requested.
<b>EVALUATION:</b>	To be requested.
<b>EXPERIENCE ELSEWHERE:</b>	To be researched.
<b>SOURCE OF INFORMATION:</b>	Kathleen Boucher, Senior Legislative Attorney, County Council
<b>APPLICATION WITHIN MUNICIPALITIES:</b>	This bill applies to any covered building that is a part of a project that requires preliminary subdivision plan approval or site plan approval from the Planning Board. It also applies to any covered building for which a building permit must be obtained from the County. The latter element of the bill applies in all municipalities except Rockville and Gaithersburg, which issue their own building permits.
<b>PENALTIES:</b>	See current law for penalties relating to violation of a condition of a preliminary subdivision plan approval, site plan approval, or building permit.



LEED-NC

# LEED-NC Version 2.2 Registered Project Checklist

<< enter project name >>

<< enter city, state, other details >>

Yes ? No

## Sustainable Sites 14 Points

<b>Y</b>	Prereq 1	Construction Activity Pollution Prevention	Required
	Credit 1	Site Selection	1
	Credit 2	Development Density & Community Connectivity	1
	Credit 3	Brownfield Redevelopment	1
	Credit 4.1	Alternative Transportation, Public Transportation Access	1
	Credit 4.2	Alternative Transportation, Bicycle Storage & Changing Rooms	1
	Credit 4.3	Alternative Transportation, Low-Emitting and Fuel-Efficient Vehicles	1
	Credit 4.4	Alternative Transportation, Parking Capacity	1
	Credit 5.1	Site Development, Protect or Restore Habitat	1
	Credit 5.2	Site Development, Maximize Open Space	1
	Credit 6.1	Stormwater Design, Quantity Control	1
	Credit 6.2	Stormwater Design, Quality Control	1
	Credit 7.1	Heat Island Effect, Non-Roof	1
	Credit 7.2	Heat Island Effect, Roof	1
	Credit 8	Light Pollution Reduction	1

Yes ? No

## Water Efficiency 5 Points

	Credit 1.1	Water Efficient Landscaping, Reduce by 50%	1
	Credit 1.2	Water Efficient Landscaping, No Potable Use or No Irrigation	1
	Credit 2	Innovative Wastewater Technologies	1
	Credit 3.1	Water Use Reduction, 20% Reduction	1
	Credit 3.2	Water Use Reduction, 30% Reduction	1

Yes ? No

## Energy & Atmosphere 17 Points

<b>Y</b>	Prereq 1	Fundamental Commissioning of the Building Energy Systems	Required
<b>Y</b>	Prereq 2	Minimum Energy Performance	Required
<b>Y</b>	Prereq 3	Fundamental Refrigerant Management	Required
	Credit 1	Optimize Energy Performance	1 to 10
	Credit 2	On-Site Renewable Energy	1 to 3
	Credit 3	Enhanced Commissioning	1
	Credit 4	Enhanced Refrigerant Management	1
	Credit 5	Measurement & Verification	1
	Credit 6	Green Power	1

continued...

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Yes ? No

## Materials & Resources 13 Points

<b>Y</b>	Prereq 1	<b>Storage &amp; Collection of Recyclables</b>	Required
	Credit 1.1	<b>Building Reuse</b> , Maintain 75% of Existing Walls, Floors & Roof	1
	Credit 1.2	<b>Building Reuse</b> , Maintain 100% of Existing Walls, Floors & Roof	1
	Credit 1.3	<b>Building Reuse</b> , Maintain 50% of Interior Non-Structural Elements	1
	Credit 2.1	<b>Construction Waste Management</b> , Divert 50% from Disposal	1
	Credit 2.2	<b>Construction Waste Management</b> , Divert 75% from Disposal	1
	Credit 3.1	<b>Materials Reuse</b> , 5%	1
	Credit 3.2	<b>Materials Reuse</b> , 10%	1
	Credit 4.1	<b>Recycled Content</b> , 10% (post-consumer + ½ pre-consumer)	1
	Credit 4.2	<b>Recycled Content</b> , 20% (post-consumer + ½ pre-consumer)	1
	Credit 5.1	<b>Regional Materials</b> , 10% Extracted, Processed & Manufactured Region.	1
	Credit 5.2	<b>Regional Materials</b> , 20% Extracted, Processed & Manufactured Region.	1
	Credit 6	<b>Rapidly Renewable Materials</b>	1
	Credit 7	<b>Certified Wood</b>	1

Yes ? No

## Indoor Environmental Quality 15 Points

<b>Y</b>	Prereq 1	<b>Minimum IAQ Performance</b>	Required
<b>Y</b>	Prereq 2	<b>Environmental Tobacco Smoke (ETS) Control</b>	Required
	Credit 1	<b>Outdoor Air Delivery Monitoring</b>	1
	Credit 2	<b>Increased Ventilation</b>	1
	Credit 3.1	<b>Construction IAQ Management Plan</b> , During Construction	1
	Credit 3.2	<b>Construction IAQ Management Plan</b> , Before Occupancy	1
	Credit 4.1	<b>Low-Emitting Materials</b> , Adhesives & Sealants	1
	Credit 4.2	<b>Low-Emitting Materials</b> , Paints & Coatings	1
	Credit 4.3	<b>Low-Emitting Materials</b> , Carpet Systems	1
	Credit 4.4	<b>Low-Emitting Materials</b> , Composite Wood & Agrifiber Products	1
	Credit 5	<b>Indoor Chemical &amp; Pollutant Source Control</b>	1
	Credit 6.1	<b>Controllability of Systems</b> , Lighting	1
	Credit 6.2	<b>Controllability of Systems</b> , Thermal Comfort	1
	Credit 7.1	<b>Thermal Comfort</b> , Design	1
	Credit 7.2	<b>Thermal Comfort</b> , Verification	1
	Credit 8.1	<b>Daylight &amp; Views</b> , Daylight 75% of Spaces	1
	Credit 8.2	<b>Daylight &amp; Views</b> , Views for 90% of Spaces	1

Yes ? No

## Innovation & Design Process 5 Points

	Credit 1.1	<b>Innovation in Design</b> : Provide Specific Title	1
	Credit 1.2	<b>Innovation in Design</b> : Provide Specific Title	1
	Credit 1.3	<b>Innovation in Design</b> : Provide Specific Title	1
	Credit 1.4	<b>Innovation in Design</b> : Provide Specific Title	1
	Credit 2	<b>LEED® Accredited Professional</b>	1

Yes ? No

## Project Totals (pre-certification estimates) 69 Points

Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points

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